

# Work Order ID 86568

July-05-12 10:45:09 AM

Aug 15

\*86568\*

Page 1

Item ID: D350-591-311 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Heli-Access-Step, Long LH  
 Start Date: 7/05/12 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 7/27/12 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

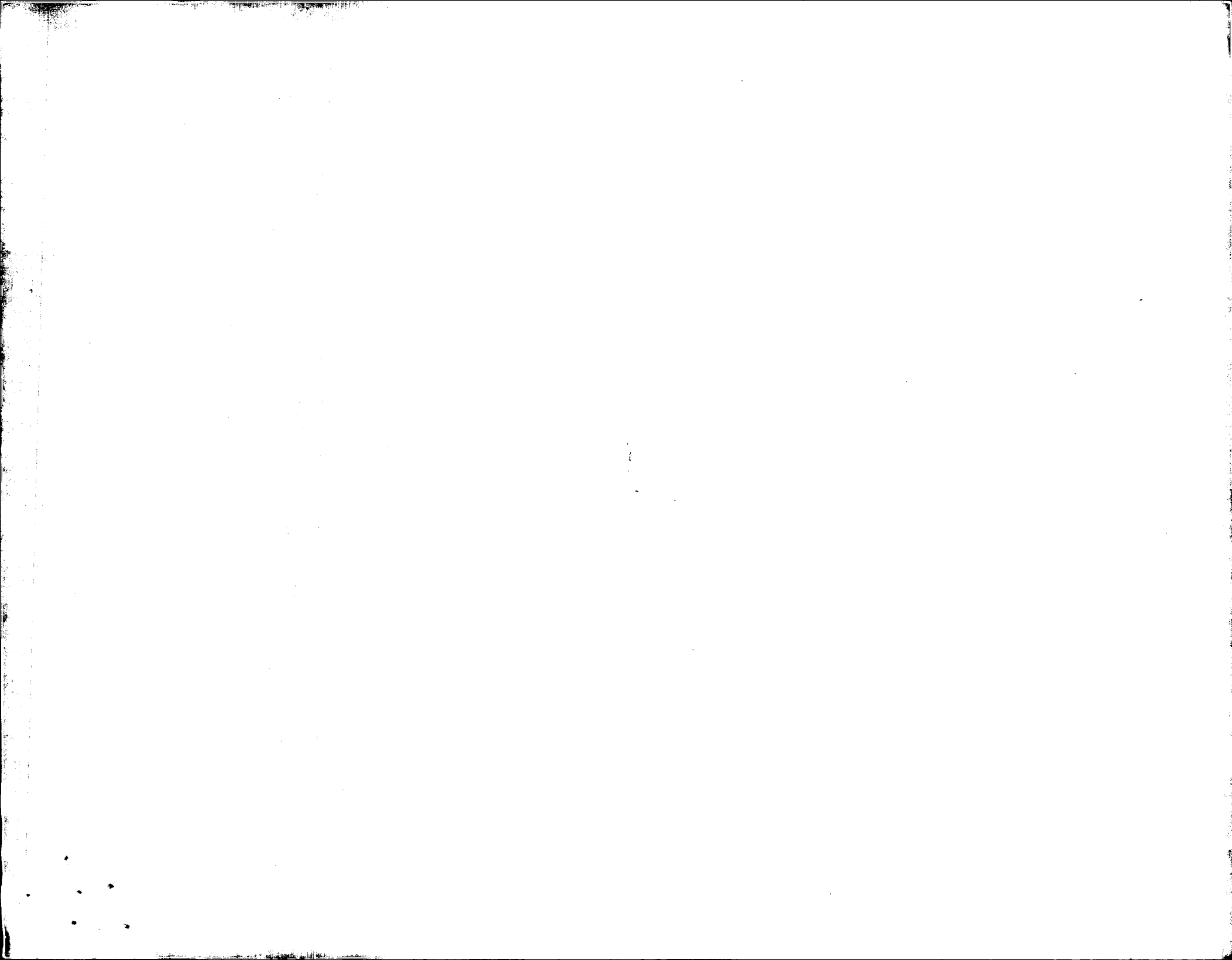
Approvals: Process Plan: W Date: Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3272	Rev B								
100	DOCUMENT CONTROL	0.00							
*100*									
DC	Memo	0.00							
Document Control	Photocopy bluefile and type labels as per PPP D350-591-311 CHG001								
110	Large Fab	0.00							
*110*									
Large Fab	Memo	0.00							
Large Fab	1-Bevel end for welding FWD ONLY								
	2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272								
	A/RAluminum Rod 120854								
	1208130								
	3-Grind End Plate flush								

DAS 16

for MLJ 12-8-9  
 10

10  
 12.07.12  
 Ae  
 12.07.24



**\*86568\***

July-05-12 10:45:09 AM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**\*10\***

**Cust Item ID:**

**\*10\***

**Customer:**

**Reference:**

Run Start \*NR1\*

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

**\*120\***

QC

## Memo

0.00

## Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

**\*130\***

OC

## Memo

0.00

## Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

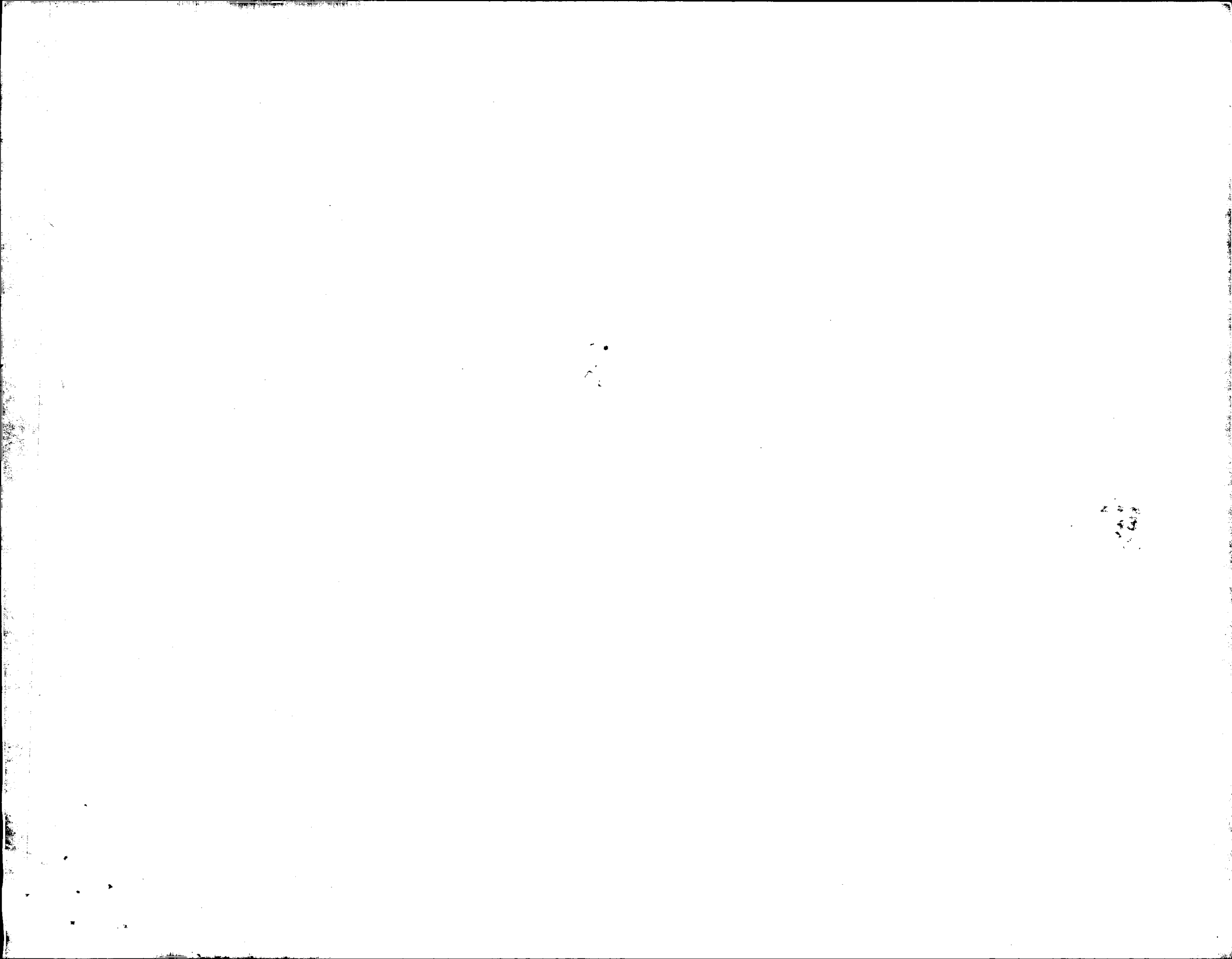
**\*140\***

HandFinish

## Memo

0.00

## Hand Finishing



# Work Order ID 86568

**\*86568\***

Page 3

July-05-12 10:45:09 AM

Item ID: D350-591-311

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12 Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 7/27/12 Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

**\*NR1\***

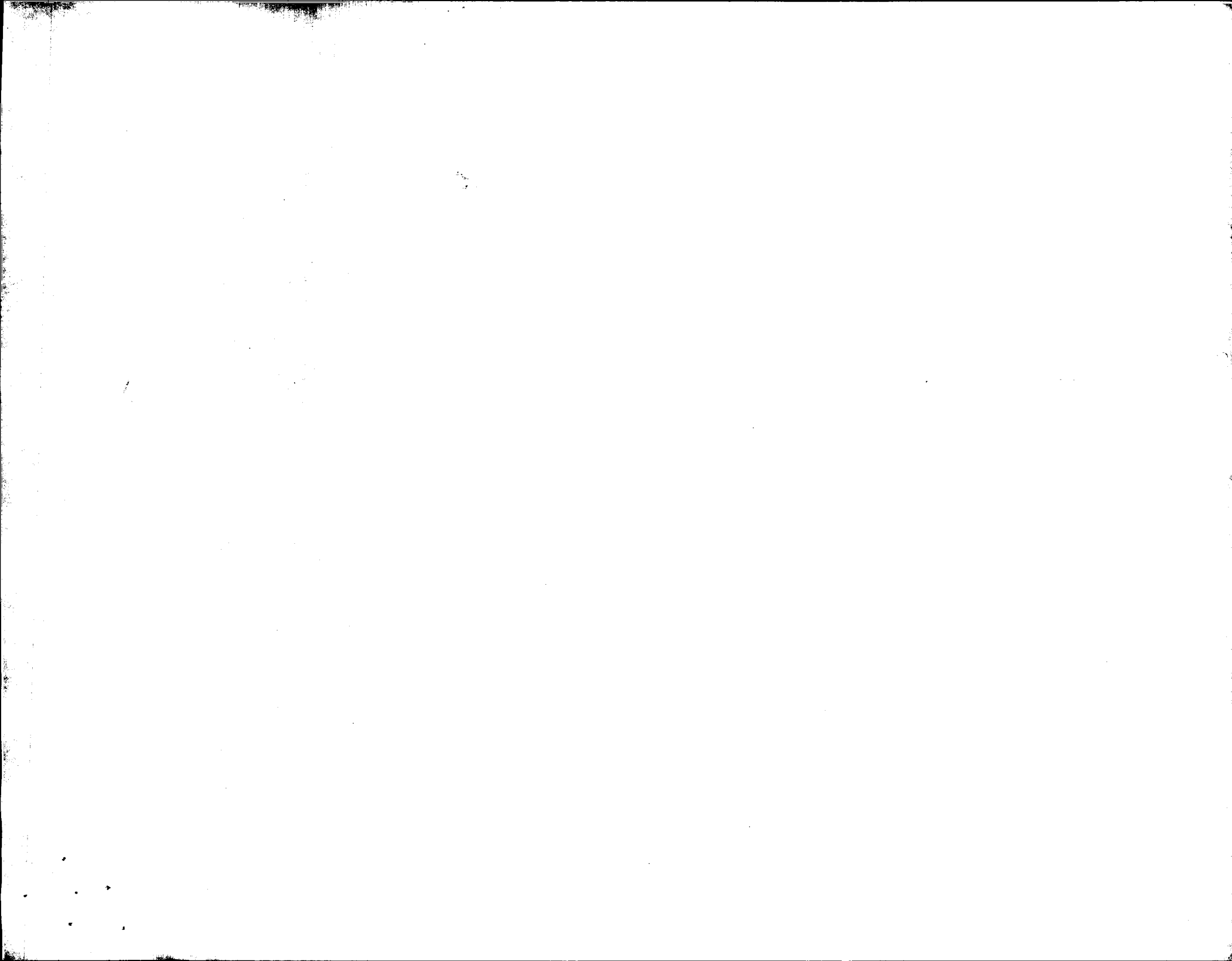
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00							
<b>*150*</b>						10			
QC	Memo	0.00							
Quality Control									12.07.30
180		0.00							
<b>*180*</b>	Large Fab					10			
Large Fab	Memo	0.00							
Large Fab	1-Assemble Leg Assembly as per Dwg D3272.								
	2-Leave one rivet out until welding is complete.								
	3-Bevel Aft end for welding								
	4-Inspect for foreign object as per QSI 024								
	5-Weld Aft End Plate as per QSI 004 & Dwg D3272								
	A/RAluminum Rod 120854								
	6-Grind End Plate flush								
	7-Install last rivet as per Dwg.								

12.08.02



# Work Order ID 86568

\*86568\*

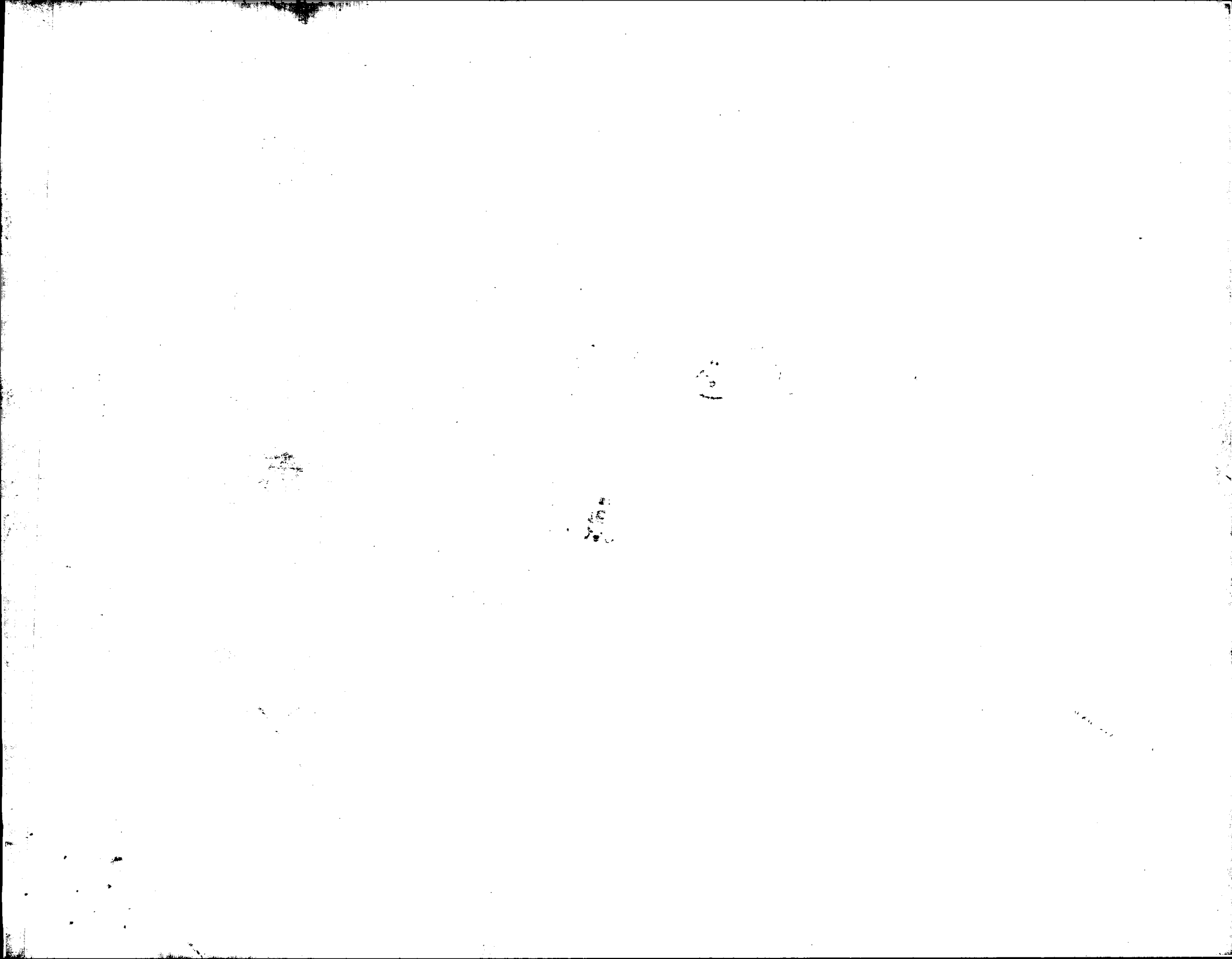
Page 4

July-05-12 10:45:09 AM

Item ID: D350-591-311 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
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 Start Date: 7/05/12 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 7/27/12 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00 0.00	DAS 16 8-8	12/6/07					
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00	Smp 12-8-07	DAS 16 8-8	2/6/07				10 W
210 *210* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00							10 7/6 12-8-7





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## Memo

# Work Order ID 86568

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July-05-12 10:45:09 AM

Item ID: D350-591-311 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
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 Required Date: 7/27/12 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
*250*									
Packaging	Memo	0.00							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
*260*									
QC	Memo	0.00							
Quality Control									
270		0.00							
*270*	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-311								
	Location: _____								

JB 6. 12/4/8 (10)

DAS 16 8-8 12/6/10

710  
LTV

10x 80

12-8-10

Rev B.

100

**Work Order ID 86568****\*86568\***

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July-05-12 10:45:09 AM

Item ID: D350-591-311 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Heli-Access-Step, Long LH  
Start Date: 7/05/12 Start Qty: 10.00 **\*10\*** Cust Item ID:  
Required Date: 7/27/12 Req'd Qty: 10.00 **\*10\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
<b>*280*</b>									
QC	Memo	0.00							
Quality Control									

12/8/13 *[Signature]*  
MLJ 12608/10



# Picklist Print

July-05-12 10:45:06 AM

Page 1

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

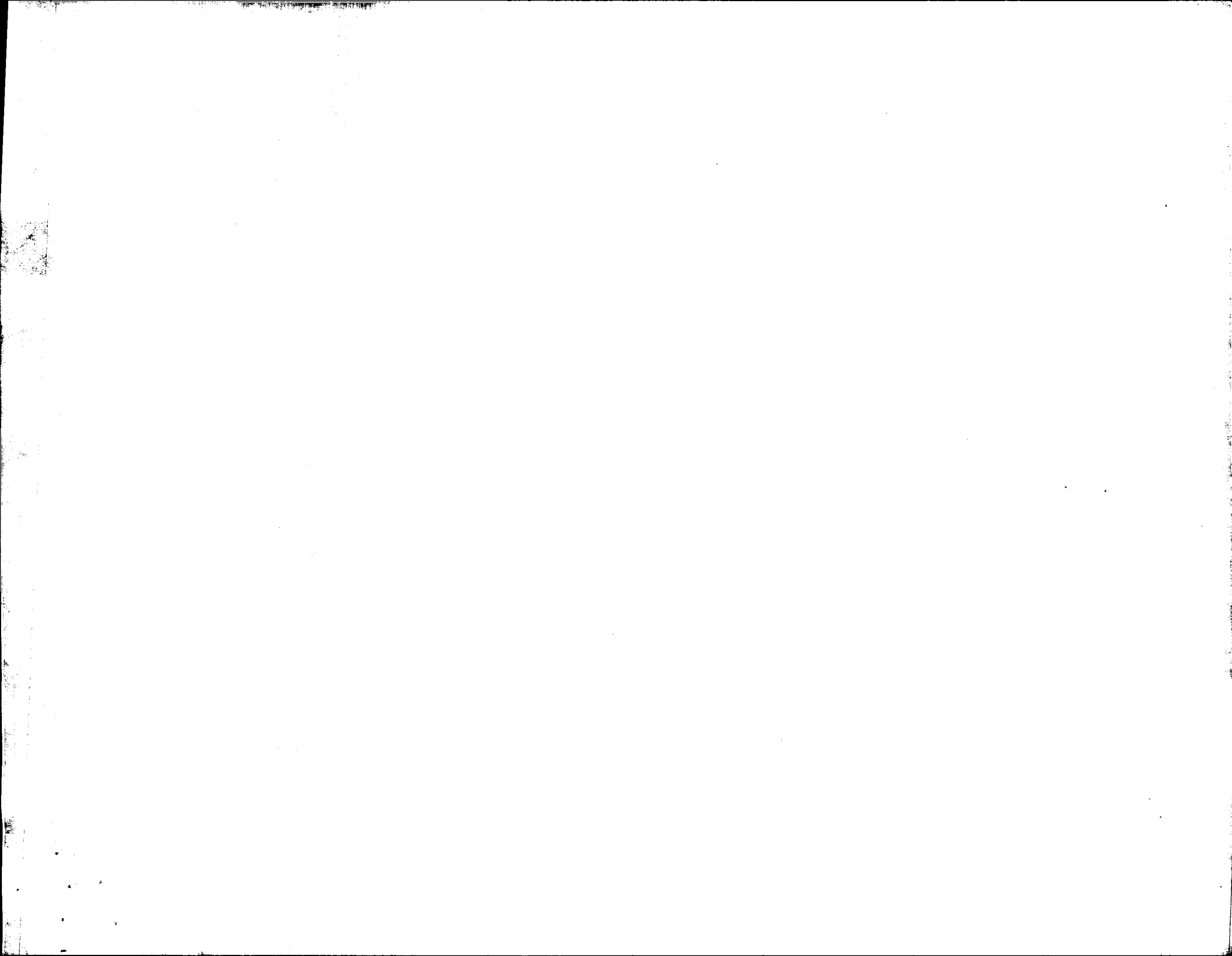
Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A04.03.22New issue KJ/RF  
IPP Rev:B 07-06-09 Added D3272-1 JLM  
IPP C returned to CHG001 for Eurocopter, ref NCR08-082 LL verified by:EC  
route seq in bom DD 10.04.28 verified by:EC  
IPP Rev:D fixe

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3272-1 Step		Manufactured	No			110	Each	5.0000	1	10		12.07.11	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST	B86565	-10							
				WA		15							
					84812	5							
D3067-1 End Plate		Manufactured	No			110	Each	133.0000	1	10		12.07.12	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA		129							
					78608	4							
					83855	50							
					84534	75							
				WA016		4							
					67582	2							
					68214	1							
					79607	1							
D3219-1 Plate		Manufactured	No			110	Each	250.0000	2	20		12.07.12	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA		191							
					82221	74							
					83852	117							
				WA016		18							
					73410	12							
					77674	6							
				WA017		41							
					81971	41							



# Picklist Print

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Page 2

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

D3066-1 Manufactured No

180 Each 99.0000 2 20

B86964 (x20)  
Ae 12.07.30

Location	Loc Qty	Loc Code
ST176	31	
83854	31	
WA	68	
85449	68	

\* MS20600-AD4W4  
Rivets

Purchased No

180 Each 3,202.0000 16 160

M121653 (x84)  
Ae 12.07.30

Location	Loc Qty	Loc Code
321	878	
121652	878	
ST321	2324	
121011	9	
121340	315	
121444	2000	

D3065-041  
Step Leg Assembly Hi

Manufactured No

180 Each 73.0000 1 10

Ae 12.07.30

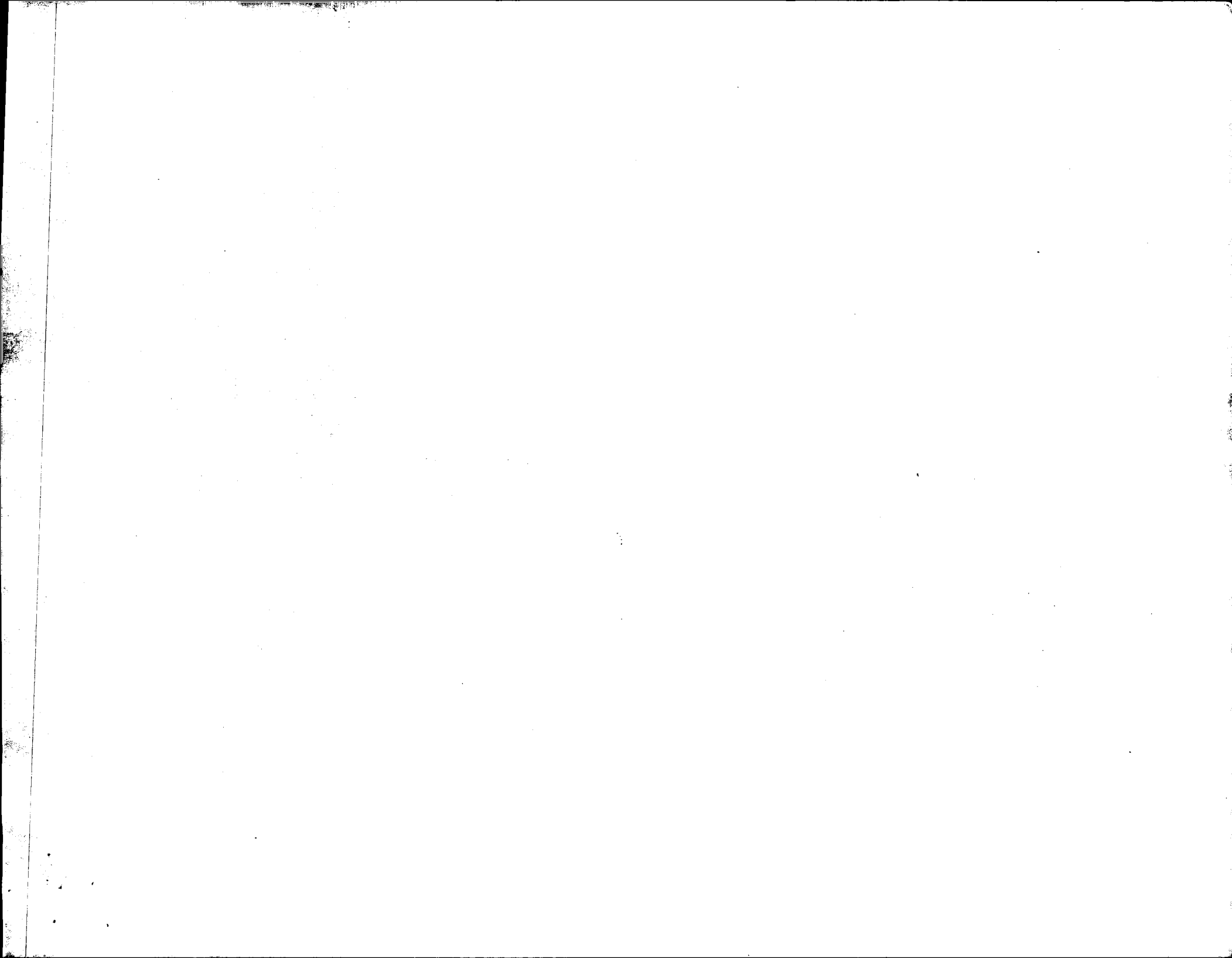
Location	Loc Qty	Loc Code
WA	73	
66149	0	
79336	1	
83870	32	
83871	40	

July-05-12 10:45:07 AM

Shop Packet Print

Page 2





# Picklist Print

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Page 3

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

D3067-1  
End Plate

Manufactured No

180 Each 133.0000

1 10

12.07.31

Location	Loc Qty	Loc Code
WA	129	
78608	4	
83855	50	
84534	75	10
WA016	4	
67582	2	
68214	1	
79607	1	

Purchased No

250 Each 76.0000

2 20

122416 6x

Location	Loc Qty	Loc Code
ST353	76	
121652	76	

Manufactured No

250 Each 146.0000

2 20

121652 14x

Location	Loc Qty	Loc Code
ST481	146	
83311	46	
83853	100	

Manufactured No

250 Each 93.0000

1 10

83311 6x  
83853 14x  
12/4/9 (10)

Location	Loc Qty	Loc Code
ST471	40	
83857	40	
ST481	53	
83856	13	
83858	40	

83857

AN3-35A Bolt

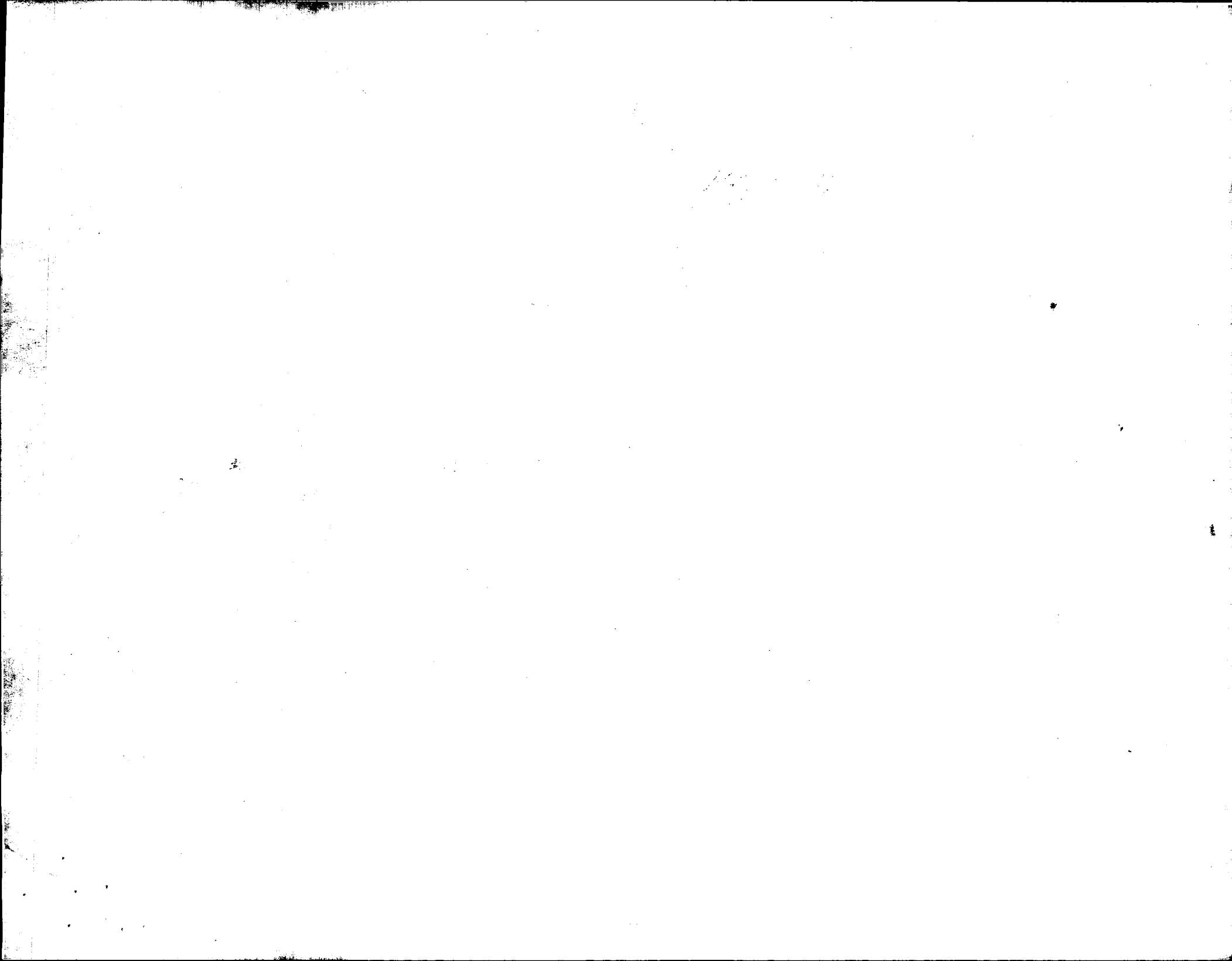
D3235-1 Mounting Lug

D3278-041 Support Assembly

July-05-12 10:45:07 AM

Shop Packet Print

Page 3



# Picklist Print

July-05-12 10:45:07 AM

Page 4

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

AN960JD416 Washer Purchased No

NAS1149D0463J

250 Each 29.0000

16

160

m/22441

## Location

## Loc Qty

## Loc Code

ST351

29

116289

8

119097

21

AN960JD516 Washer Purchased No

NAS1149D0563J

250 Each 12.0000

4

40

m/21255

## Location

## Loc Qty

## Loc Code

ST338

12

2612

12

AN5-36A Bolt Purchased No

250 Each 224.0000

2

20

122416 JB

## Location

## Loc Qty

## Loc Code

340

74

121652

74

ST340

150

121708

50

122141

100

D2618 Bushing Manufactured No

250 Each 204.0000

2

20

JB

## Location

## Loc Qty

## Loc Code

ST012

204

76130

2

83614

1

84646

201

D2230-3 Lug Manufactured No

250 Each 158.0000

4

40

84646 12/08/08

## Location

## Loc Qty

## Loc Code

ST480

158

83261

2

84133

156

24784133

July-05-12 10:45:08 AM

Shop Packet Print

Page 4



# Picklist Print

July-05-12 10:45:08 AM

Page 5

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

D2856-400 Manufactured No

Abrasion Strip

\*\*\* cut (2) at 7.20" (D2856-400-720) \*\*\*

250 f 168.8425 1.2

86905<sup>12</sup> ✓ JB

Location	Loc Qty	Loc Code
ST403	159.398	
81875	159.398	
ST409	9.4445	
63735	0.6696	
68076	0.3149	
71164	8.46	

S<sub>AV</sub> Lyness  
81760011

MS21042L3

Nut

Purchased No

250 Each 3,330.0000

2 20 ✓ JB

Location	Loc Qty	Loc Code
ST300	1330	
117885	32	
119017	771	
119075	138	
121444	389	
ST317	2000	
122141	2000	

Purchased No

250 Each 1,143.0000

122141 8 80 ✓ JB 12/08/08

Location	Loc Qty	Loc Code
ST357	1143	
120187	19	
120422	2	
120770	12	
121652	912	
122063	198	

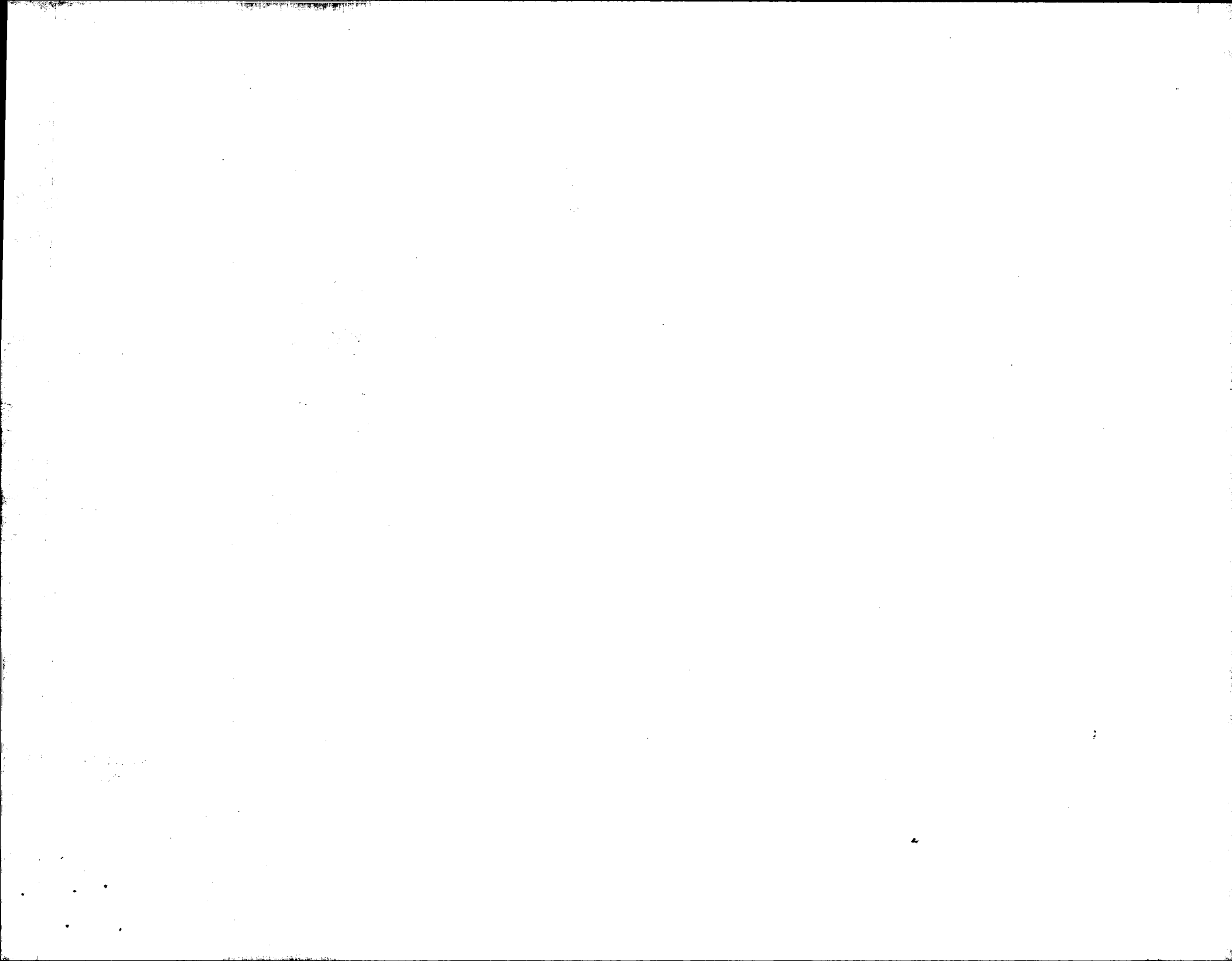
122063

AN4-13A Bolt

July-05-12 10:45:08 AM

Shop Packet Print

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# Picklist Print

July-05-12 10:45:08 AM

Work Order ID: 86568

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 7/05/12

Required Date: 7/27/12

Start Qty: 10.00

Required Qty: 10.00

MS21042L5

Purchased

No

250

Each

1,224.0000

20

Nut

## Location

## Loc Qty

## Loc Code

300

500

121652

500

ST300

724

108827

4

116105

5

116548

43

117611

2

119109

658

17651

4

2937

8

119109

MS21042L4

Purchased

No

250

Each

1,705.0000

80

Nut

## Location

## Loc Qty

## Loc Code

ST300

1705

119075

116

121011

193

121444

1096

121652

300

121444

AN960JD10

NAS1149D0363J

Purchased

No

250

Each

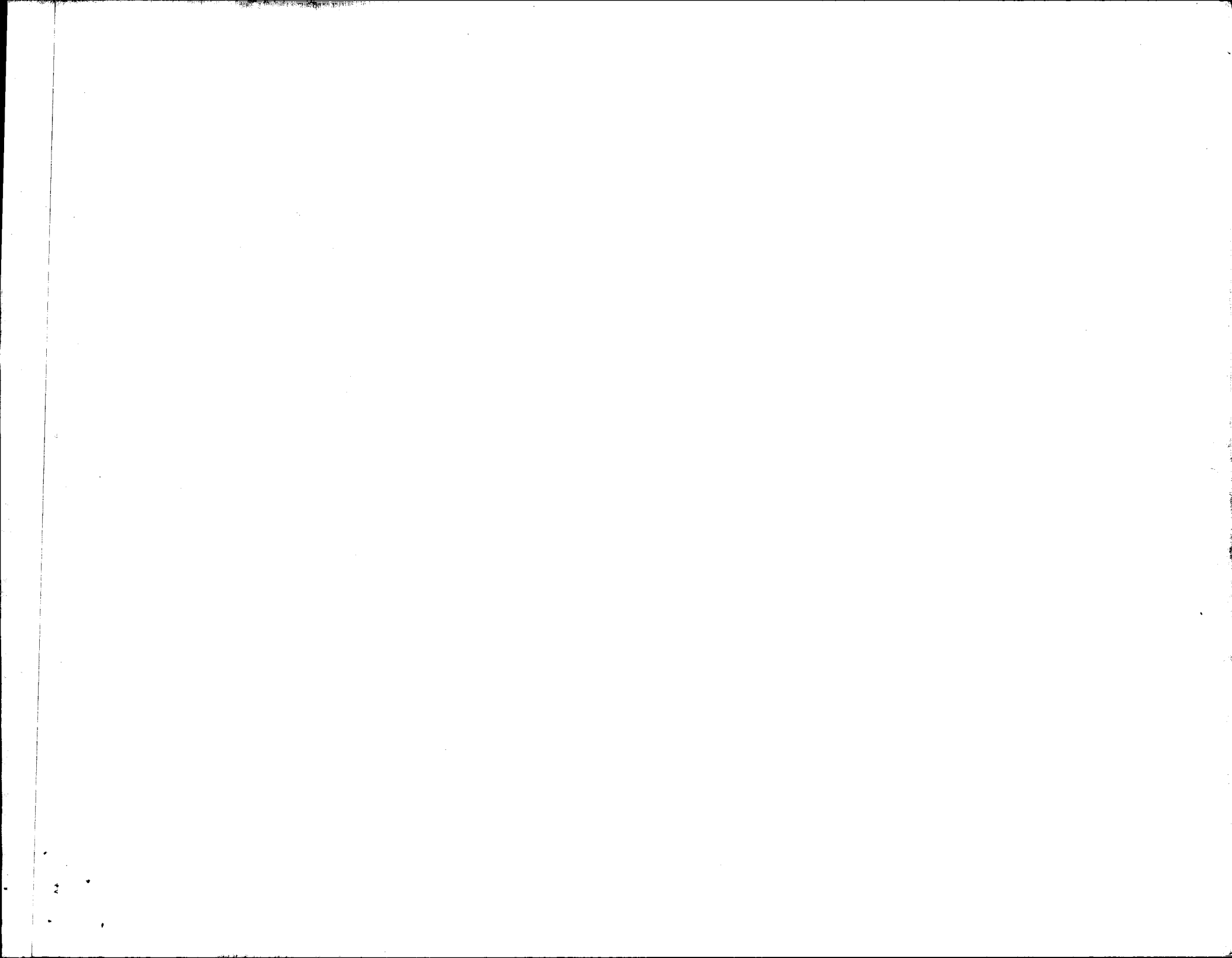
0.0000

Washer

122378

12/08/08







DESIGN <i>QD</i>	DRAWN BY <i>JB</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

**RELEASED**

*07.06.04* *[Signature]*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**B**

**GENERAL NOTES:**

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

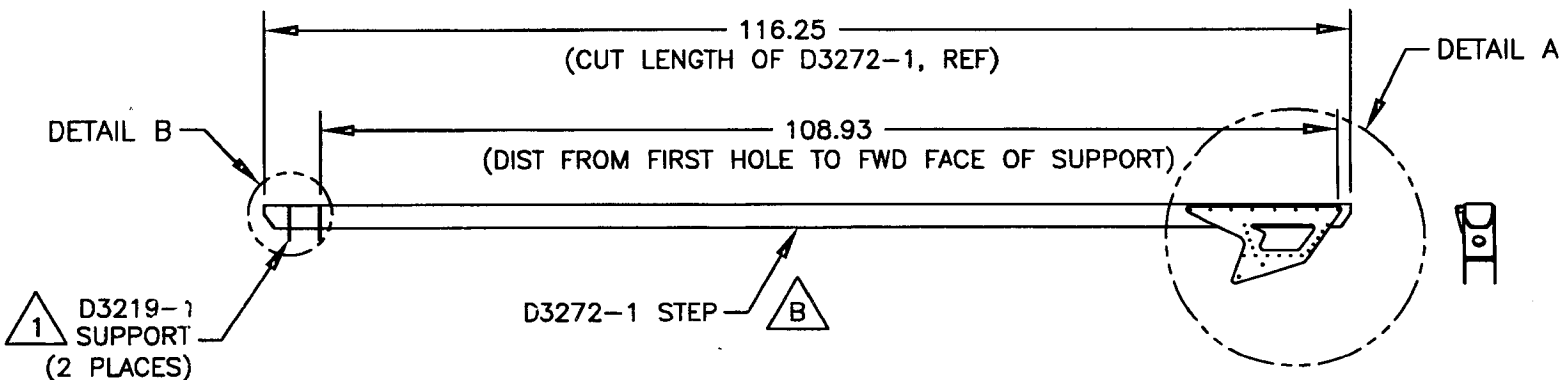
*Copy to file*

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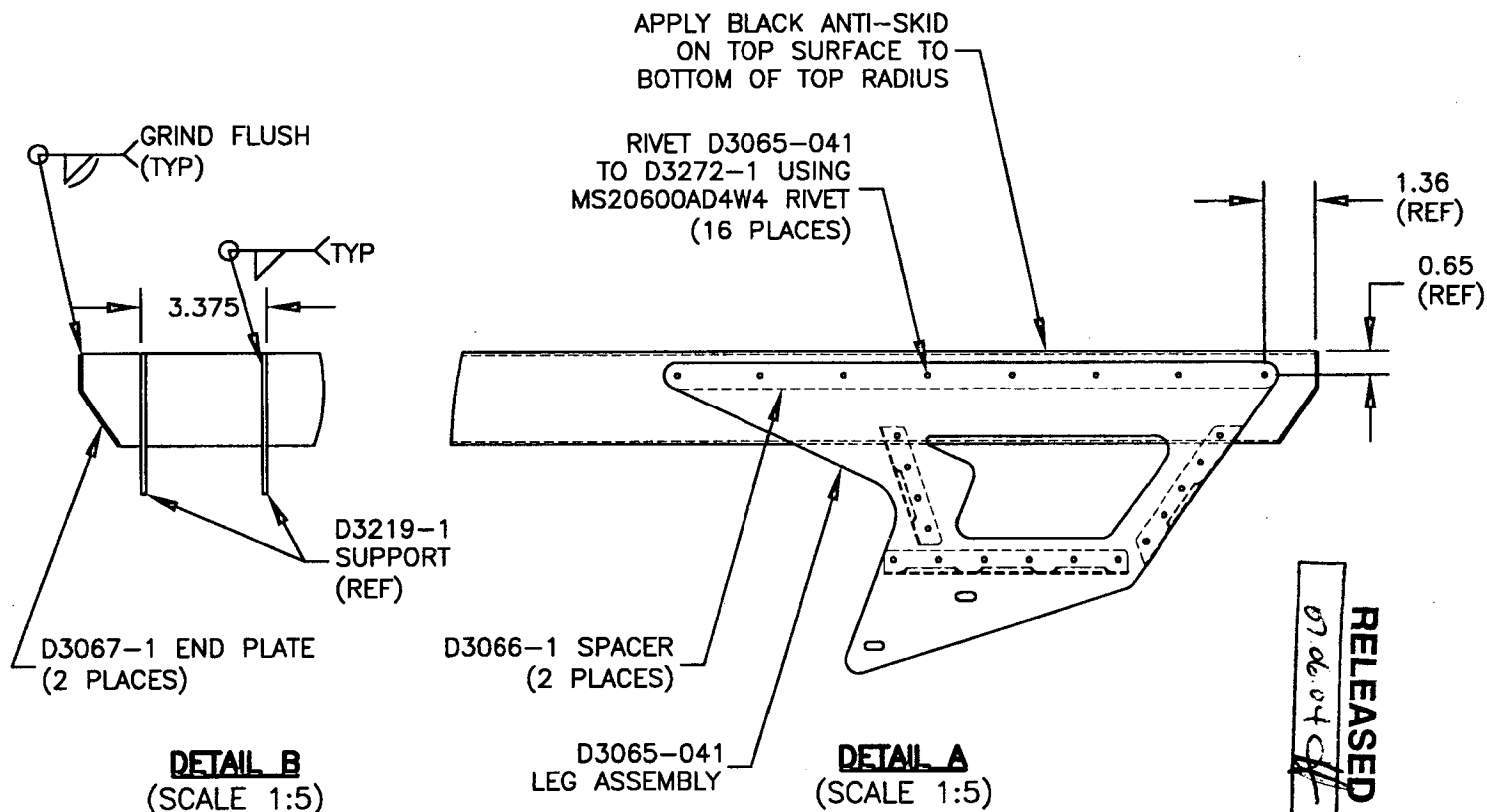
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DESIGN	DRAWN BY	DART AEROSPACE LTD	
90	90	HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
CE	CE	D3272	SHEET 2 OF 3
DATE	TITLE	SCALE	
07.05.18	STEP ASSEMBLY, HI LONG	1:20	



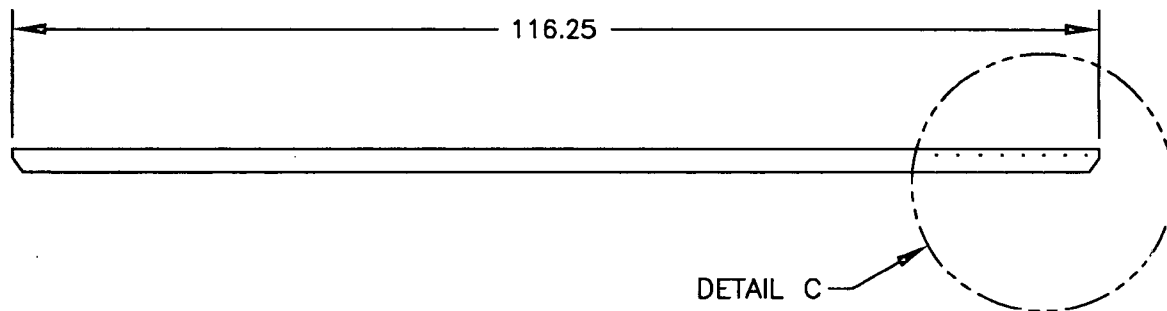
**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
**D3272-042 STEP ASSEMBLY (RH, OPPOSITE)**



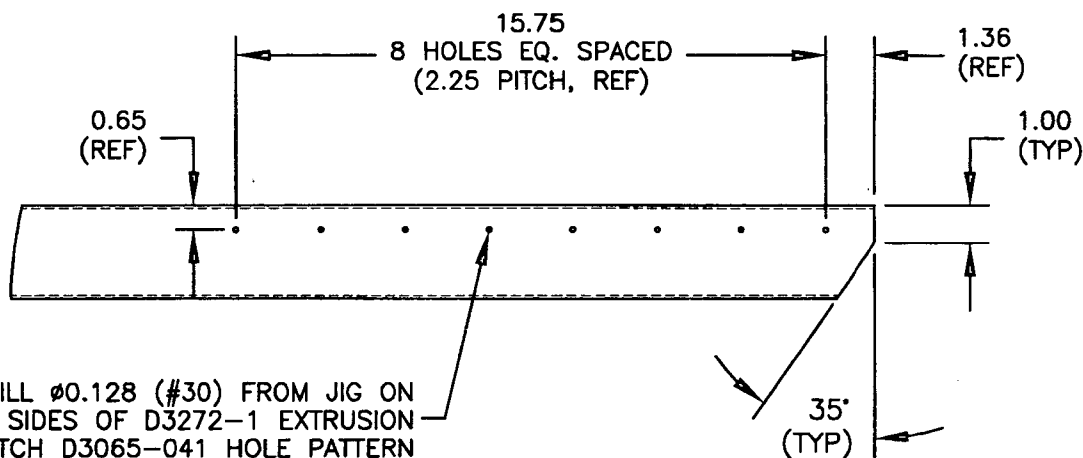
RELEASED  
07.06.04



DESIGN	49	DRAWN BY	JR	DART AEROSPACE LTD
CHECKED	CE	APPROVED	JR	HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	DRAWING NO.	D3272	REV. B
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 3 OF 3
		SCALE	1:20	



**B** **D3272-1 STEP**  
(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL  $\phi 0.128$  (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

**DETAIL C**  
(SCALE 1:5)

RELEASED

07.06.04

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	<b>Heli-Access-Step™</b> , Long Step – High Skid, LH
	X							D350-591-212	<b>Heli-Access-Step™</b> , Long Step – High Skid, RH
		X						D350-591-213	<b>Heli-Access-Step™</b> , Short Step – High Skid, LH
			X					D350-591-214	<b>Heli-Access-Step™</b> , Short Step – High Skid, RH
				X				D350-591-215	<b>Heli-Access-Step™</b> , Short Step – Low Skid, LH
					X			D350-591-216	<b>Heli-Access-Step™</b> , Short Step – Low Skid, RH
						X		D350-591-311	<b>Heli-Access-Step™</b> , Long Step – High Skid, LH
							X	D350-591-312	<b>Heli-Access-Step™</b> , Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						12	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

\*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.